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(54) Title: CHIMERIC ALPHA Q-GUSTDUCIN G-PROTEINS

(57) Abstract: $G_{\text{eq-Chartducin}}$ chimeric G-proteins that functionally couple to G-protein coupled receptors. The chimeras can be expressed in heterologous cell systems and can be used as the basis of assays for identifying modulators of taste response, in particular bitter, sweet or umami taste responses.

INTERNATIONAL SEARCH REPORT

PCT/CH 03/00830

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C07K14/47

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ, MEDLINE, Sequence Search

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	MODY SEJAL M ET AL: "Incorporation of Galphaz-specific sequence at the carboxyl terminus increases the promiscuity of Galphal6 toward Gi-coupled receptors" MOLECULAR PHARMACOLOGY, BALTIMORE, MD, US, vol. 57, no. 1, January 2000 (2000-01), pages 13-23, XP002199066 ISSN: 0026-895X abstract page 16, right-hand column, paragraph 3 - page 18, right-hand column, paragraph 1 page 21, right-hand column, paragraph 2 page 22, left-hand column, paragraph 2	1-15

Y Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
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Date of the actual completion of the international search 14 July 2004	Date of mailing of the international search report 23/07/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer . Niebuhr-Ebel, K

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	C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT Category Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim					
Category °	Citation of document, with indication, where appropriate, or the relevant passages	. Noovalli to stalli No				
A	KOSTENIS E: "Is Galphal6 the optimal tool for fishing ligands of orphan G-protein-coupled receptors?" TRENDS IN PHARMACOLOGICAL SCIENCES, ELSEVIER TRENDS JOURNAL, CAMBRIDGE, GB, vol. 22, no. 11, 1 November 2001 (2001-11-01), pages 560-564, XP004320245 ISSN: 0165-6147 the whole document	1-15				
A	WO 02/36622 A (SENOMYX INC; XU HONG (US); YAO YONG (US)) 10 May 2002 (2002-05-10) "Galphaq rotein variants and their use in the analysis and discovery of agonisis and antagonists of chemosensory receptors"	1-15				
P,X	UEDA TAKASHI ET AL: 'Functional interaction between T2R taste receptors and G-protein alpha subunits expressed in taste receptor cells." JOURNAL OF NEUROSCIENCE, vol. 23, no. 19, 13 August 2003 (2003-08-13), pages 7376-7380, XP009033223 ISSN: 0270-6474 abstract; figure 1 page 7376, right-hand column, paragraph 2 page 7379, left-hand column, paragraph 2 right-hand column, paragraph 1	1-15				

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Information on patent family members

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